Laparoendoscopic single-site (LESS) partial nephrectomy (PN) represents a very challenging procedure because of the potential need for hilar clamping and extensive suturing and the increased risk of perioperative complications [1–3].

In their letter, Cai et al. refer to our recent study, which represents the first large multi-institutional analysis specifically evaluating risk factors for outcomes of LESS-PN [4]. We fully understand their concerns, and we are aware that LESS-PN is still far from representing an established alternative to other minimally invasive approaches to PN. Nevertheless, it might be premature to definitively dismiss this procedure as a purely academic exercise.

Although the number of LESS-PNs performed every year is not significant, the number of cases performed with a LESS approach is increasing, wherever there is a commitment of surgeons willing to embrace this surgical effort.

Another issue raised by several of our colleagues concerns the use of an additional trocar during LESS. According to multidisciplinary consensus, the use of an additional 3-mm trocar has yet to be considered “pure” LESS; in the presence of an additional trocar >3 mm or more than one additional trocar, it should be considered conversion to “reduced port” laparoscopy or standard laparoscopy, respectively [5]. This view has been questioned recently by Georgiou et al., who suggested the use of the term hybrid LESS [6].

In our study, the surgeons required additional ports in 117 cases (61.6%), whereas conversion to standard laparoscopy (additional trocar ≥5 mm) was reported in only 5.8% of all cases [4]. This means that most procedures were performed with a pure LESS approach, and deviation from the strict philosophy of LESS was verified in only a few cases.

Semantics aside, we believe that the important point is that surgeons embracing LESS are aware of the fact that safety comes first.

According to our results, robotic surgery was more effective than conventional LESS in reducing the risk of surgical complications, and it can be speculated that this might be related to the facilitation of dissection and suturing during nephron-sparing surgery. Nevertheless, the application of a robotic platform did not eliminate the need for an additional trocar.

Hence, is LESS-PN a purely academic experimental pursuit?

We think that every academic institution has the moral responsibility to support and to pioneer the development of new surgical techniques, as happened at the beginning of the 1990s with laparoscopy. Moreover, besides the real advantages of LESS with regard to postoperative pain and cosmetic outcomes, it can be speculated that any difference is unlikely in terms of cancer control with LESS or conventional laparoscopic techniques. Randomized controlled trials with longer follow-up are awaited to address the oncologic efficacy and safety of LESS. In the meantime, careful patient selection should be used when embarking on LESS for urologic malignancies to optimize the outcomes—again, embracing the concept that safety comes first.

Conflicts of interest: The authors have nothing to disclose.

References


